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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,044	01/07/2004	Richard M. Long	47171-00409USPT	6072

41230 7590 06/21/2005

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EXAMINER

MATTHEWS, TERRELL HOWARD

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/754,044

Applicant(s)

LONG ET AL.

Examiner

Terrell H. Matthews

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/22/2004</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 1-31 are pending in the instant application

Information Disclosure Statement

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609 subsection III. A(1) states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609 subsection III. C(1). In regards to the list detailing the pending U.S. applications it should be noted that no signature block was left to initial off on applications that were taken into consideration.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Tranquilla. (6278795).

Referring to claim 1. Anderson discloses a "Multi-Pocket Currency Discriminator" as claimed. See Figs 1-42 and respective portions of the specification. Anderson discloses a currency discriminator (10) inclusive of an input receptacle (10), a touch panel display (15), a transport mechanism with guide plates (240), a plurality of output receptacles (217a, 271b), sensor (235a, 235b), upper drive rolls (223, 241, 264), lower drive rolls (266, 280, 282), an evaluation region (247), passive rolls (250, 251), and diverter (260). Anderson further discloses that the input receptacle is adapted to receive currency bills to be processed (See Col. 4l. 63-65) and that the output receptacles are adapted to receive currency bills that have been processed (See Col. 5 l. 1-6). Anderson discloses as well that the evaluation region (247) is used for determining information concerning each of the currency bills (See Col. 2 l. 22-24). Anderson does not disclose a transportation mechanism including a first portion adapted to transport bills at a first speed and a second portion adapted to transport bills

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at a second speed or a controller adapted to cause the first portion and the second portion of the transport mechanism to transport bills at substantially the same speed when the distance between consecutive bills transported by the transport mechanism is at least a predetermined distance, the controller being adapted to cause the first portion of the transport mechanism to slow the speed at which bills are transported such that the first speed is less than the second speed when the evaluation unit determines when the distance between two consecutive bills transported by the transport mechanism is less than the predetermined distance. It should be noted that Anderson's apparatus contains a controller mechanism to control the functions of the transport mechanism, which does not just function randomly. Additionally it should be noted that Anderson's apparatus includes a touch panel display (15) which functions to simplify the operations of the currency discriminator. (See Col. 5 l. 41-42). Tranquilla discloses a "Document Transport with Gap Adjust" as claimed. See Figs. 1-3 and respective portions of the specification. Tranquilla discloses a document transport apparatus that takes documents and moves them along a feed path past sensors and readers. (See Col. 3 l. 20-25). Tranquilla further discloses that documents are transported at a constant speed along the feed path to the recognition systems and discloses that his invention detects the under space after the document has been picked and corrects the gap-size before the document reaches other down stream function mechanisms in the transport (See Col. 3 l. 39-41, 52-57). Tranquilla additionally describes that the spacing between documents is sensed at edge detectors A&B and that if an under space is detected between two successive documents that rollers may (R-A, R-B) begin to decelerate the

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next document so that an increase will occur in the spacing bringing it back to the proper size (See Col. 4 l. 1-3). Tranquilla further discloses that rollers (R-A, R-B) are driven by independent motors and that the motors are controlled by a control block (CB) (See Col. 4. l. 9, 50-55). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include a transportation mechanism including a first portion that was adapted to transport bills at a first speed and a second portion that was adapted to transport bills at a second speed, a controller adapted to cause the first portion and the second portion of the transport mechanism to transport bills at substantially the same speed when the distance between consecutive bills transported by the transport mechanism is at least a predetermined distance and with a controller that was adapted to cause the first portion of the transport mechanism to slow the speed at which bills are transported such that the first speed is less than the second speed when the evaluation unit determines the distance between two consecutive bills transported by the transport mechanism is less than the predetermined distance as taught by Tranquilla so that currency bills would not get incorrectly counted or stacked upon one another and cause the machine to jam.

Referring to claim 2. Anderson discloses the invention as described above.

Anderson does not disclose the predetermined distance being less than about one inch. Tranquilla discloses the invention as described above. Tranquilla discloses that the spacing between documents is sensed at edge detectors A&B and that if an under space is detected between two successive documents that rollers may (R-A, R-B) begin to decelerate the next document so that an increase will occur in the spacing bringing it

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back to the proper size (See Col. 4 l. 1-3). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include the edge detectors as taught by Tranquilla so that if documents were less than about one inch from one another the transport mechanism could decelerate the next document and thus prevent them overlapping, from being counted incorrectly, or causing jams.

Referring to claim 3-6. Anderson discloses the invention as described above.

Anderson further discloses that the first and second portions of the transportation mechanism include a plurality of driven rollers for transporting the currency bills (See Fig. 2 & 9 as well as Col. 6. l 36 & Col. 10 l. 30-31). Anderson does not disclose that a first and second motor are electrically coupled to the controller in which the motor is adapted to drive the driven rollers of the first portion and the second to drive the driven rollers of the second portion. Tranquilla discloses the invention as described above.

Tranquilla further discloses that the edge detectors, which detect the distance between documents, provide input signals to a computer control block (CB) to control the speed of the motors for the drive rollers and that the control block can be arranged to issue velocity commands to the drive motors (See Col. 4 l. 51-55, 62-64). It should be understood that the motors are independent of one another as described above and can therefore control specific drive rollers. It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include a controller that could control the speed of the motors electrically coupled to the drive rollers so that if documents were to close to each other the controller had the ability to slow or speed

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one of them up in order to keep documents from getting incorrectly counted or stuck together.

Referring to claim 7-9. Anderson discloses the invention as described above.

Anderson further discloses that there are two output receptacles (217a, 217b) (See Col. 4 l. 66 – Col. 5. l. 1) and that transport mechanism includes a diverter (260) which is located in the second portion of the transport mechanism for directing bills into one of the two output receptacles (See Col. 6 l. 4-5). It is understood from the drawings that the diverter (260) is located in the second portion of the transport mechanism (See Fig. 2).

Referring to claim 10. Anderson discloses the invention as described above.

Anderson further discloses that the evaluation unit (247) is disposed along the first portion of the transport mechanism. It is understood from the drawings that the evaluation unit is located in the first portion (See Fig. 2).

Referring to claim 11. Anderson discloses the invention as described above.

Anderson does not disclose a controller that is adapted to cause the first portion of the transport mechanism to resume transporting bills at substantially the same speed as the second portion of the transport mechanism upon transporting the two consecutive bills separated by a distance of at least the predetermined distance past the evaluation unit. Tranquilla discloses the invention as described above. Tranquilla further discloses that documents are transported at a constant speed along the feed path to the recognition systems and discloses that his invention detects the under space after the document has been picked and corrects the gap-size before the document reaches other down

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stream function mechanisms in the transport (See Col. 3 l. 39-41, 52-57). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include the controller block of Tranquilla so that drivers could resume there appropriate speed once the gap between documents was corrected.

Referring to claim 12. Anderson discloses the invention as described in detail above. Anderson further discloses that the first portion of the transport mechanism is upstream of the second portion of the transport mechanism. It is understood from the drawings the first portion is upstream from the second (See Fig. 2).

Referring to claim 13-17. It would have been obvious to perform the method steps of claim 13 when assembling the "multi-pocket currency discriminator of Anderson as modified by Tranquilla in its usual and expected fashion.

Referring to claim 18. Anderson discloses the invention as described above. Anderson discloses a currency discriminator (10) inclusive of an input receptacle (10), a touch panel display (15), a transport mechanism with guide plates (240), a plurality of output receptacles (217a, 271b), sensor (235a, 235b), upper drive rolls (223, 241, 264), lower drive rolls (266, 280, 282), an evaluation region (247), passive rolls (250, 251), and diverter (260). Anderson further discloses that the input receptacle is adapted to receive currency bills to be processed (See Col. 4l. 63-65) and that the output receptacles are adapted to receive currency bills that have been processed (See Col. 5 l. 1-6). Anderson discloses as well that the evaluation region (247) is used for determining information concerning each of the currency bills (See Col. 2 l. 22-24). Anderson does not disclose a transportation mechanism including a first portion

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adapted to transport bills at a first speed and a second portion adapted to transport bills at a second speed or a controller adapted to cause the first portion and the second portion of the transport mechanism to transport bills at substantially the same speed when the distance between consecutive bills transported by the transport mechanism is at least a predetermined distance, the controller being adapted to cause the first portion of the transport mechanism to slow the speed at which bills are transported such that the first speed is less than the second speed when the evaluation unit determines when the distance between two consecutive bills transported by the transport mechanism is less than the predetermined distance. It should be noted that Anderson's apparatus contains a controller mechanism to control the functions of the transport mechanism, which does not just function randomly. Additionally it should be noted that Anderson's apparatus includes a touch panel display (15) which functions to simplify the operations of the currency discriminator. (See Col. 5 l. 41-42) and that the transport mechanism includes a diverter (260), which is located in the second portion of the transport mechanism for directing, bills into one of the two output receptacles (See Fig. 2 & Col. 6 l. 4-5). Tranquilla discloses a "Document Transport with Gap Adjust" as claimed. See Figs. 1-3 and respective portions of the specification. Tranquilla discloses a document transport apparatus that takes documents and moves them along a feed path past sensors and readers. (See Col. 3 l. 20-25). Tranquilla further discloses that documents are transported at a constant speed along the feed path to the recognition systems and discloses that his invention detects the under space after the document has been picked and corrects the gap-size before the document reaches other down stream

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function mechanisms in the transport (See Col. 3 l. 39-41, 52-57). Tranquilla additionally describes that the spacing between documents is sensed at edge detectors A&B and that if an under space is detected between two successive documents that rollers may (R-A, R-B) begin to decelerate the next document so that an increase will occur in the spacing bringing it back to the proper size (See Col. 4 l. 1-3). Tranquilla further discloses that rollers (R-A, R-B) are driven by independent motors and that the motors are controlled by a control block (CB) (See Col. 4 l. 9, 50-55). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include a transportation mechanism including a first portion that was adapted to transport bills at a first speed and a second portion that was adapted to transport bills at a second speed, a controller adapted to cause the first portion and the second portion of the transport mechanism to transport bills at substantially the same speed when the distance between consecutive bills transported by the transport mechanism is at least a predetermined distance and with a controller that was adapted to cause the first portion of the transport mechanism to slow the speed at which bills are transported such that the first speed is less than the second speed when the evaluation unit determines the distance between two consecutive bills transported by the transport mechanism is less than the predetermined distance as taught by Tranquilla so that currency bills would not get incorrectly counted or stacked upon one another and cause the machine to jam.

Referring to claim 19. Anderson discloses the invention as described above.

Anderson does not disclose the predetermined distance being less than about one inch.

Tranquilla discloses the invention as described above. Tranquilla discloses that the

spacing between documents is sensed at edge detectors A&B and that if an under space is detected between two successive documents that rollers may (R-A, R-B) begin to decelerate the next document so that an increase will occur in the spacing bringing it back to the proper size (See Col. 4 l. 1-3). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include the edge detectors as taught by Tranquilla so that if documents were less than about one inch from one another the transport mechanism could decelerate the next document and thus prevent them overlapping, from being counted incorrectly, or causing jams.

Referring to claim 20-23. Anderson discloses the invention as described above. Anderson further discloses that the first and second portions of the transportation mechanism include a plurality of driven rollers for transporting the currency bills (See Fig. 2 & 9 as well as Col. 6. l. 36 & Col. 10 l. 30-31). Anderson does not disclose that a first and second motor are electrically coupled to the controller in which the motor is adapted to drive the driven rollers of the first portion and the second to drive the driven rollers of the second portion. Tranquilla discloses the invention as described above. Tranquilla further discloses that the edge detectors, which detect the distance between documents, provide input signals to a computer control block (CB) to control the speed of the motors for the drive rollers and that the control block can be arranged to issue velocity commands to the drive motors (See Col. 4 l. 51-55, 62-64). It should be understood that the motors are independent of one another as described above and can therefore control specific drive rollers. It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include a controller that

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could control the speed of the motors electrically coupled to the drive rollers so that if documents were to close to each other the controller had the ability to slow or speed one of them up in order to keep documents from getting incorrectly counted or stuck together.

Referring to claim 24-26. Anderson discloses the invention as described above. Anderson further discloses that there are two output receptacles (217a, 217b) (See Col. 4 l. 66 – Col. 5. l. 1) and that transport mechanism includes a diverter (260) which is located in the second portion of the transport mechanism for directing bills into one of the two output receptacles (See Col. 6 l. 4-5). It is understood from the drawings that the diverter (260) is located in the second portion of the transport mechanism (See Fig. 2).

Referring to claim 27. Anderson discloses the invention as described above. Anderson further discloses that the evaluation unit (247) is disposed along the first portion of the transport mechanism. It is understood from the drawings that the evaluation unit is located in the first portion (See Fig. 2).

Referring to claim 28. Anderson discloses the invention as described above. Anderson does not disclose a controller that is adapted to cause the first portion of the transport mechanism to resume transporting bills at substantially the same speed as the second portion of the transport mechanism upon transporting the two consecutive bills separated by a distance of at least the predetermined distance past the evaluation unit. Tranquilla discloses the invention as described above. Tranquilla further discloses that documents are transported at a constant speed along the feed path to the recognition

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systems and discloses that his invention detects the under space after the document has been picked and corrects the gap-size before the document reaches other downstream function mechanisms in the transport (See Col. 3 l. 39-41, 52-57). It would have been obvious to a person of ordinary skill in the art to modify the apparatus of Anderson to include the controller block of Tranquilla so that drivers could resume there appropriate speed once the gap between documents was corrected.

Referring to claim 29. Anderson discloses the invention as described in detail above. Anderson further discloses that the first portion of the transport mechanism is upstream of the second portion of the transport mechanism. It is understood from the drawings the first portion is upstream from the second (See Fig. 2).

Referring to claim 30. Anderson discloses the invention as described above. Anderson further discloses that the system functions by transporting the bills one at a time from the input receptacle into the transport mechanism (See Col. 4 l. 63-66).

Referring to claim 31. Anderson discloses the invention as described above. Anderson further discloses that the diverter, which is located in the second portion of the transport mechanism, directs bills to either the first or second output receptacle. It is understood that the diverter receives the bills from the first portion of the transport mechanism (See Col. 6 l. 4-6).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Mazur U.S. Patent No. 6,880,692 discloses a method and apparatus for document processing inclusive of an evaluation unit, diverter, transportation mechanism, and input and output receptacles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terrell H. Matthews whose telephone number is (571)272-5929. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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TECHNOLOGY CENTER 3600

